



Evidence for UI GreenMetric Questionnaire

UI GreenMetric Questionnaire

University : Termez State University

Country : Uzbekistan

Web Address : <https://www.tersu.uz/>

[4] Water (WR)

[4.7] Impact of Water Management Programs in Supporting the Sustainable Development Goals (SDGs) (WR.7)

Program	Main Achievement	Measured Impact	SDGs Supported
Water Conservation	Metered artesian and municipal water supply; monthly consumption control.	Average annual managed water volume: 42.28 thousand m ³ . Combined measures report 50–60% lower drinking-water demand on campuses.	6, 11, 12, 13
Rainwater Harvesting	Roof runoff and spring water collected in reservoirs of 72 m ³ , 46 m ³ and 25 m ³ .	143 m ³ total storage capacity; collected water supports irrigation and technical use during dry periods.	6, 11, 13, 15
Water Recycling and Wastewater Management	Wastewater conveyed through sewer pipes to the Termez city treatment plant for three-stage treatment.	Approximately 42.28 thousand m ³ /year managed; 95–97% purification and about 40–41 thousand m ³ suitable for technical reuse.	6, 11, 12, 15
Water-Efficient Appliances	183 of 212 WCs, 45 of 67 bathroom fixtures and all 286 sprinklers are water-efficient.	Average equipment coverage: 84.3%; reduced consumption and improved operational hygiene.	6, 11, 12, 13
Water Pollution Control and Monitoring	Campus waterways, sewer routes and monitoring points are mapped; physical, chemical and biological parameters are monitored.	Reduced pollution risk, safer wastewater routing and improved campus sanitation and environmental safety.	3, 6, 11, 15
Research and Environmental Education	Hydrogel, membrane filtration and heavy-metal removal research integrated with awareness activities.	Hydrogel applications reduce irrigation-water demand by up to 40% and strengthen water-related innovation and education.	4, 6, 9, 12, 13, 15



Ecohydrogel production and application process



Wastewater treatment facility used for three-stage treatment



Rainwater harvesting reservoir



Water-efficient irrigation



Metered water monitoring



Water-related laboratory activity

Documented TerSU water-management infrastructure, efficient-use measures and monitoring activities

Description:

Termez State University evaluates the impact of its water-management programs through measurable resource savings, wastewater control, reuse potential, improved sanitation, green-area resilience and water-related research. The programs are implemented as an integrated system rather than as isolated activities.



- **Resource efficiency:** Low-flow toilets, efficient bathroom fixtures and sprinkler systems provide 84.3% average water-efficient equipment coverage. Together with metering and monthly comparison of consumption, these measures reduce avoidable demand and support reported drinking-water savings of 50–60%.
- **Reuse and climate resilience:** Rainwater and spring-water collection systems provide 143 m³ of storage capacity and reduce reliance on potable water for irrigation. The program helps maintain campus green areas during low-rainfall periods.
- **Pollution prevention:** Campus wastewater is collected through the sewer network and transferred to the Termez city treatment plant. Three-stage mechanical, biological and tertiary treatment achieves a documented purification level of 95–97%, enabling technical reuse of approximately 40–41 thousand m³ per year.
- **Health and environmental quality:** Mapped drainage and sewer routes, inspection activities and water-quality monitoring reduce pollution risks, improve sanitation and protect campus soil, vegetation and receiving water environments.
- **Research, education and social value:** Research on ecohydrogels, filtration membranes and removal of toxic metals supports innovation and practical water protection. Hydrogel applications can reduce irrigation-water demand by up to 40%, while awareness activities strengthen responsible behavior among students and staff.
- **SDG contribution:** The combined impact directly supports SDG 6, SDG 11, SDG 12, SDG 13 and SDG 15, with additional contributions to SDG 3, SDG 4 and SDG 9 through sanitation, education and water-treatment innovation.

Additional evidence links (videos, institutional pages and related materials):

- TerSU development strategy and water-management priorities: <https://tersu.uz/struct/view/1000159>
- TerSU water-protection and monitoring policy page: <https://tersu.uz/struct/view/1000444>
- Ecohydrogel research media evidence: <https://sdg.tersu.uz/news/view/476>
- Termez State University official website: <https://www.tersu.uz/>

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